

**Commonwealth of Kentucky
Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382**

**Title V/Synthetic Minor
AIR QUALITY PERMIT
Issued under 401 KAR 52:020**

Draft

Permittee Name:	Publishers Printing Company Lebanon Junction Facility
Mailing Address:	13487 South Preston Highway Lebanon Junction, Kentucky 40150
Source Name:	Same as above
Mailing Address:	Same as above
Source Location:	Same as above
Permit #:	V-05-014
Source ID #:	21-029-00032
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Activity #:	APE20050001
Review Type	Renewal of Title V, Synthetic Minor, Construction, Operating
Regional Office	Division for Air Quality Frankfort Regional Office 643 Teton Trail, Suite B Frankfort, KY 40601 Phone 502-564-3358
County:	Bullitt
Application Complete Date:	February 19, 2005
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**John S. Lyons, Director
Division for Air Quality**

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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

EP 1 (1) Heidelberg - 5 Unit Web Offset Heatset Lithographic Printing Press 402
Construction commenced: April 1991

MP1: Maximum continuous rating: Ink – 0.025 ton/hr
MP2: Fountain solution – 1.3 lbs/hr
MP3: Manual Blanket wash – 0.35 gals/hr
MP4: Dryer (3.056 MMBTU/hr natural gas fired (propane as back up))
Controlled by a MEGTEC Cleanswitch CS-300-95-HT natural gas (propane as back up) thermal oxidizer (EP 14)
Destruction Efficiency - 95%

EP 2 (2) Hantscho - 8 Unit Web Offset Heatset Lithographic Printing Press 401
Construction commenced: April 1991

MP1: Maximum continuous rating: Ink - 50 lbs/hr
MP2: Fountain solution - 1.3 lbs/hr
MP3: Manual Blanket wash – 0.563 gal/hr
MP4: Dryer (4.76 MMBTU/hr natural gas fired (propane as back up))
Controlled by a MEGTEC Cleanswitch CS-300-95-HT natural gas (propane as back up) thermal oxidizer (EP 14)
Destruction Efficiency - 95%

EP 3 (2) Hantscho - 5 Unit Web Offset Heatset Lithographic Printing Press 404
Construction commenced: April 1991

MP1: Maximum continuous rating: Ink - 50 lbs/hr
MP2: Fountain solution - 1.3 lbs/hr
MP3: Manual Blanket wash – 0.35 gal/hr
MP4: Dryer (4.0 MMBTU/hr natural gas fired (propane as back up))
Controlled by a MEGTEC Cleanswitch CS-300-95-HT natural gas (propane as back up) thermal oxidizer (EP 14)
Destruction Efficiency - 95%

EP 4 (2) Hantscho - 6 Unit Web Offset Heatset Lithographic Printing Press 406
Construction commenced: Fall 1993

MP1: Maximum continuous rating: Ink - 60 lbs/hr
MP2: Fountain solution - 1.3 lbs/hr
MP3: Manual Blanket wash – 0.35 gal/hr/hr
MP4: Dryer (4.0 MMBTU/hr natural gas fired (propane as back up))
Controlled by a MEGTEC Cleanswitch CS-300-95-HT natural gas (propane as back up) thermal oxidizer (EP 14)
Destruction Efficiency - 95%

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- EP 5 (3)** Hantscho Mark IV - 4 Unit Web Offset Heatset Lithographic Printing Press 405
Construction commenced: February 1994
- MP1:** Maximum continuous rating: Ink - 60 lbs/hr
MP2: Fountain solution - 0.7 lb/hr
MP3: Manual Blanket wash – 0.425 gal/hr
MP4: Dryer (4.0 MMBTU/hr natural gas fired (propane as back up))
Controlled by a MEGTEC Cleanswitch CS-300-95-HT natural gas (propane as back up) thermal oxidizer (EP 14)
Destruction Efficiency - 95%
- EP 6 (4)** Hantscho Mark VII - 8 Unit Web Offset Heatset Lithographic Printing Press 407
Construction commenced: February 1994
- MP1:** Maximum continuous rating: Ink - 60 lbs/hr
MP2: Fountain solution - 1.3 lbs/hr
MP3: Manual Blanket wash – 0.625 gal/hr/hr
MP4: Dryer (6.4 MMBTU/hr natural gas fired (propane as back up))
Controlled by a MEGTEC Cleanswitch CS-300-95-HT natural gas (propane as back up) thermal oxidizer (EP 14)
Destruction Efficiency - 95%
- EP 7 (6)** Hantscho Mark XVI - 8 Unit Web Offset Heatset Lithographic Printing Press 411
Construction commenced: May 1997
- MP1:** Maximum continuous rating: Ink - 50 lbs/hr.
MP2: Fountain solution - 1.3 lbs/hr.
MP3: Manual Blanket wash – 0.563 gal/hr.
MP4: Dryer (6.48 MMBTU/hr natural gas fired (propane as back up))
Controlled by a MEGTEC Cleanswitch CS-300-95-HT natural gas (propane as back up) thermal oxidizer (EP 14)
Destruction Efficiency - 95%
- EP 8 (7)** Hantscho Mark VI - 4 Unit Web Offset Heatset Lithographic Printing Press 409
Construction commenced: March 1996
- MP1:** Maximum continuous rating: Ink - 50 lbs/hr.
MP2: Fountain solution - 0.6 lb/hr.
MP3: Manual Blanket wash – 0.288 gal/hr
MP4: Dryer (2.8 MMBTU/hr natural gas fired (propane as back up))
Controlled by a MEGTEC Cleanswitch CS-300-95-HT natural gas (propane as back up) thermal oxidizer (EP 14)
Destruction Efficiency - 95%

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- EP 9 (7)** Hantscho - 8 Unit Web Offset Heatset Lithographic Printing Press 410
Construction commenced: January 1999
- MP1:** Maximum continuous rating: Ink - 50 lbs/hr.
MP2: Fountain solution - 1.3 lbs/hr.
MP3: Manual Blanket wash – 0.5 gal/hr
MP4: Dryer (4.0 MMBTU/hr natural gas fired (propane as back up))
Controlled by a MEGTEC Cleanswitch CS-300-95-HT natural gas (propane as back up) thermal oxidizer (EP 14)
Destruction Efficiency - 95%
- EP 10 (7)** Hantscho Mark VI - 4 Unit Web Offset Heatset Lithographic Printing Press 412
Construction commenced: June 2001
- MP1:** Maximum continuous rating: Ink - 50 lbs/hr.
MP2: Fountain solution – 1.5 lbs/hr.
MP3: Auto Blanket wash – 0.5 gal/hr
MP4: Dryer (1.8 MMBTU/hr natural gas fired (propane as back up))
Controlled by a MEGTEC Cleanswitch CS-300-95-HT natural gas (propane as back up) thermal oxidizer (EP 16)
Destruction Efficiency - 95%
- EP 13 (-)** Man Roland - 4 Unit Web Offset Heatset Lithographic Printing Press 416
Projected date of installation April 2005
- MP1:** Maximum continuous rating: Ink - 75 lbs/hr.
MP2: Fountain solution - 2.5 lbs/hr.
MP3: Auto Blanket wash – 0.29 gal/hr.
MP4: Dryer (4.0 MMBTU/hr natural gas fired (propane as back up))
Controlled by a MEGTEC Cleanswitch CS-300-95-HT natural gas (propane as back up) thermal oxidizer (EP 16)
Destruction Efficiency - 95%

APPLICABLE REGULATIONS:

401 KAR 50:012, General application effective June 24, 1992, requiring implementation of standards for national primary and secondary ambient air quality, specifies that control procedures that are reasonable, available, and practical be used.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

1. Operating Limitations:

- a. Usage rates and VOC contents of all VOC containing materials shall be restricted so as to meet the emission limitations in Section B.2.
- b. All major air contaminant sources shall as a minimum apply control procedures that are reasonable, available, and practical (RAP) required under 401 KAR 50:012, General application. The thermal oxidizer shall have minimum destruction efficiency of 95% controlling each presses dryer exhaust.

Compliance Demonstration Method:

The 95% VOC destruction efficiency by the thermal oxidizer be demonstrated by Specific Control Equipment Operating Conditions of this section.

2. Emission Limitations:

- a. VOC emissions from EP 8 (Press 409) shall not exceed equal or exceed 36 tons/yr based on a 12 month rolling total to preclude applicability of 401 KAR 51:017, Prevention of significant deterioration of air quality.
- b. VOC emissions from EP 9 (Press 410) shall not equal or exceed 20 tons/yr based on a 12 month rolling total to preclude applicability of 401 KAR 51:017, Prevention of significant deterioration of air quality.
- c. VOC emissions from Press EP 7 (411) shall not equal or exceed 20 tons/yr based on a 12 month rolling total to preclude applicability of 401 KAR 51:017, Prevention of significant deterioration of air quality.
- d. VOC emissions from Press EP 13 (416) shall not equal or exceed 10 tons/yr based on a 12 month rolling total to preclude applicability of 401 KAR 51:052, Review of new sources in or impacting upon non attainment areas.

Compliance Demonstration Method:

See Section D (2)

3. Testing Requirements:

See Section D (3).

4. Specific Monitoring Requirements:

See B (7), Specific Control Equipment Operating Conditions of this section.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Record Keeping Requirements:

- a. The permittee shall keep monthly records of the usage rates of all materials used at all the presses individually along with a calculation of total emissions of VOC for each press for the current month and per 12 months. The emissions per 12 month totals shall be based on a 12 month rolling total. These records, as well as purchase orders and invoices for all VOC containing materials shall be made available for inspection upon request by any duly authorized representatives of the Division for Air Quality.
- b. See Section D (5)

6. Specific Reporting Requirements:

See Section D (6)

7. Specific Control Equipment Operating Conditions:

EP 14(EP1) Regenerating Thermal Oxidizer
(Interlock MEGTEC System Cleanswitch CS-300-95-HT)
Maximum rate capacity of the burner: 3.46 MMBtu/hr (Natural Gas)
Secondary Fuel Propane

a. Operating Limitations:

1. Pursuant to 401 KAR 50:055, Section 2(5), the permittee shall operate the thermal oxidizer at all times printing is being performed.
2. The permittee shall install, calibrate, maintain and operate in accordance with manufacturer's specifications a temperature monitoring device in the firebox of the thermal oxidizer or in the duct immediately downstream of the firebox before any substantial heat exchange occurs. The temperature monitoring device shall be equipped with a continuous recording device.
3. The temperature-monitoring device shall have an accuracy of the greater of 0.75 percent of the temperature measurement expressed in degrees Celsius or $\pm 2.5^{\circ}\text{C}$.
4. Before using the sensor for the first time or when relocating or replacing the sensor, perform a validation check by comparing the sensor output to a calibrated temperature measurement device or by comparing the sensor output to a simulated temperature.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**b. Testing Requirements:**

1. Within 60 days after achieving the maximum production rate at which the affected facility **EP 13 (Press 416)** will be operated, but not later than 180 days after initial start-up of such facility, the permittee shall conduct performance tests on the RTO and furnish the Division's Frankfort office with a written report of the results of such performance tests or demonstrate compliance to a duly authorized representative of the Division.
2. The permittee shall use the data collected during the performance test to calculate and record the average combustion temperature. This average combustion temperature is the minimum operating set point of the thermal oxidizer.
3. Pursuant to Section VII 2(1) of the Policy Manual of the Division for Air Quality as incorporated by reference in 401 KAR 50:016, Section 1. (1), the permittee shall submit a compliance test protocol at least one month prior to the projected test date.
4. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.

c. Specific Monitoring Requirements:

1. The permittee must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs. Compliance shall be demonstrated by monitoring and recording the combustion temperature continuously*.
*Continuous parameter monitoring shall be a minimum of recording the measured value at least once every 15 minutes.
2. Perform an electronic calibration at least semi-annually. Following the electronic calibration, conduct a temperature sensor validation check in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 30 degrees Fahrenheit of the process temperature sensor reading.
3. Conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.
4. At least monthly, inspect components for integrity and electrical connections for continuity, oxidation, and galvanic corrosion.

d. Specific Recordkeeping Requirements:

1. The permittee shall maintain records of the following information for the thermal oxidizer:
 - (i) The design and/or manufacturer's specifications:
 - (ii) The operational procedures and preventive maintenance records:
 - (iii) The calibration records for the combustion temperature sensor, validation checks, and the subsequent accuracy audits:
 - (iii) Maintain a log of visual inspections of each temperature sensor if redundant temperature sensors are not used:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- (v) Maintain a record of the average combustion chamber temperature limit established during the most recent performance test and all relevant supporting data:
 - (vi) The combustion chamber temperature of the thermal oxidizer shall be recorded continuously:
 - (vii) All periods (during coating operations) during which the combustion chamber temperature of the thermal oxidizer is more than 28 degrees Celsius (50 degrees Fahrenheit) below the average combustion chamber temperature of the thermal oxidizer during the most recent performance test which demonstrated compliance. Each occurrence shall be considered a deviation from permit requirements.
 - (viii) During all periods of operation of the thermal oxidizer in which the combustion chamber temperature of the thermal oxidizer is more than 28 degrees Celsius (50 degrees Fahrenheit) below the average combustion chamber temperature of the thermal oxidizer during the most recent performance test which demonstrated compliance, or other malfunction of the thermal oxidizer, a daily log of the following information shall be kept:
 - a. Whether any air emissions were visible from the facilities associated with the thermal oxidizer.
 - b. Whether visible emissions were normal for the process.
 - c. The cause of the visible emissions.
 - d. Corrective action(s) taken shall be recorded.
 - (ix) A control efficiency of 0% shall be assumed for all periods the thermal oxidizer is receiving emissions during which the combustion chamber temperature of the thermal oxidizer is more than 28 degrees Celsius (50 degrees Fahrenheit) below the average combustion chamber temperature of the thermal oxidizer during the most recent performance test.
2. All records shall be retained at the source for a period of five years.

e. Specific Reporting Requirements:

The permittee shall identify, record, and submit a written report to the Division's Frankfort Regional Office of each instance during which the average temperature of the thermal oxidizer falls more than 28 degrees Celsius (50 degrees Fahrenheit) below that at which compliance was demonstrated during the most recent measurement of oxidizer efficiency. If no such periods occur during a particular quarter, the permittee shall state this in a semi-annual report.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- EP 11 (-)** Man Roland 4 Unit Web Offset Heatset Lithographic Printing Press 414
Construction commenced: June 2002
- MP1:** Maximum continuous rating: Ink - 60 lbs/hr.
MP2: Fountain solution - 2.0 lbs/hr.
MP3: Auto Blanket wash – 0.288 gal/hr.
MP4: Dryer (3.0 MMBTU/hr natural gas fired (propane as back up))
Controlled by a Magnum 8000 Meg TEC System natural gas
(propane as back up) catalytic oxidizer (EP 15)
Destruction Efficiency - 95%
- EP 12 (-)** Man Roland 4 Unit Web Offset Heatset Lithographic Printing Press 415
Construction commenced: June 2002
- MP1:** Maximum continuous rating: Ink - 60 lbs/hr.
MP2: Fountain solution - 2.0 lbs/hr.
MP3: Auto Blanket wash – 0.288 gal/hr.
MP4: Dryer (3.0 MMBTU/hr natural gas fired (propane as back up))
Controlled by a Magnum 8000 Meg TEC System natural gas
(propane as back up) catalytic oxidizer (EP 15)
Destruction Efficiency - 95%

APPLICABLE REGULATIONS:

401 KAR 50:012, General application effective June 24, 1992, requiring implementation of standards for national primary and secondary ambient air quality, specifies that control procedures that are reasonable, available, and practical be used applies to Presses 414 and 415.

1. Operating Limitations:

1. The RAP (reasonable, available, and practical) control requirement required under 401 KAR 50:012, General application for Press 414 and 415 is a 95% VOC destruction efficiency by the catalytic oxidizer controlling each press' dryer exhaust.

Compliance Demonstration Method:

The destruction efficiency of the catalytic oxidizer was determined to be 95% on September 24, 2004. The permittee shall demonstrate destruction efficiency of catalytic oxidizer within the life of this permit.

2. Emission Limitations:

See Operating Limitations

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

See Section D (3).

4. Specific Monitoring Requirements:

- a. The permittee shall install, calibrate, maintain and operate monitoring devices which shall indicate the operating temperature of the oxidizer. The monitoring devices shall have an accuracy of the greater of ± 0.75 percent of the temperature being measured expressed in degrees Celsius or ± 2.5 degrees Celsius. The monitoring devices shall be connected to a device(s) that records the temperature via a strip chart, electronic media or other means.
- b. See Section D (2)

5. Specific Record keeping Requirements:

- a. The permittee shall keep monthly records of the usage rates of all materials used at Presses 414 and 415 individually along with a calculation of total emissions of VOC for each press for the current month and per 12 months. The emissions per 12 month totals shall be based on a 12 month rolling total. These records, as well as purchase orders and invoices for all VOC containing materials shall be made available for inspection upon request by any duly authorized representatives of the Division for Air Quality.
- b. See Section D (5)

6. Specific Reporting Requirements:

See Section D (6)

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

7. Specific Control Equipment Operating Conditions:

EP 15 (EP2)	Catalytic Oxidizer (Magnum 8000 Meg TEC System)
Maximum rate capacity of the burner:	4.0 MMBtu/hr (Natural Gas)
Secondary Fuel	Propane

a. Operating Limitations:

- i. The printing operation shall be performed only when the average catalyst bed inlet temperature for all 3-hour periods is greater than or equal to the average catalyst bed inlet temperature of the catalytic oxidizer during the most recent performance test which demonstrated compliance.

Compliance Demonstration Method:

Compliance shall be demonstrated by continuously recording temperature at the catalyst bed inlet and calculating the 3-hr average operating temperature at 15-minute intervals.

- ii. The catalytic oxidizer control system shall be operated in accordance with manufacturer's recommendations and standard operating practices and shall be maintained and operated to ensure compliance with all requirements for each press.
- iii. The operating temperature of the catalytic oxidizer shall be maintained at a minimum of 600 degrees F when the press is operating.

b. Testing Requirements:

- i. Within with in the life of this permit, the permittee shall conduct performance tests on the catalytic oxidizer and furnish the Division's Frankfort office with a written report of the results of such performance tests or demonstrate compliance to a duly authorized representative of the Division.
- ii. Pursuant to Section VII 2(1) of the Policy Manual of the Division for Air Quality as incorporated by reference in 401 KAR 50:016, Section 1. (1), the permittee shall submit a compliance test protocol at least one month prior to the projected test date.
- iii. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.
- iv. Yearly testing of the catalytic element shall be done by a qualified testing lab.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**c. Specific Monitoring Requirements:**

- i. The permittee shall install, calibrate, maintain and operate monitoring devices which shall indicate the operating temperature of the oxidizer. The monitoring devices shall have an accuracy of the greater of ± 0.75 percent of the temperature being measured expressed in degrees Celsius or ± 2.5 degrees Celsius. The monitoring devices shall be connected to a device(s) that records the temperature via a strip chart, electronic media or other means.
- ii. The thermocouple or temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet.

d. Specific Record keeping Requirements:

The permittee shall maintain records of the following information for the catalytic oxidizer:

1. The design and/or manufacturer's specifications:
2. The operational procedures and preventative maintenance records:
3. Results of the testing of the catalytic element:
4. The temperature monitoring devices shall be recorded once per hour:
5. The permittee shall record all periods (during actual operation) during which the temperature difference across the catalyst bed of the catalytic oxidizer (outlet temperature - inlet temperature) is zero or negative and corrective actions taken:
6. The permittee shall also record all periods (during actual operation) during which the temperature difference across the catalyst bed of the catalytic oxidizer (outlet temperature - inlet temperature) is less than 80% of the of the average temperature difference of the monitoring devices as measured during the most recent performance test:
7. During all periods of startup, shutdown, or malfunction of the catalytic oxidizer, a daily log of the following shall be kept:
 - i. Whether any air emissions were visible from the facilities associated with the catalytic oxidizer:
 - ii. Whether visible emissions were normal for the process:
 - iii. The cause of the visible emissions:
 - iv. Any corrective action taken.

e. Specific Reporting Requirements:

The permittee shall submit a semi-annual report to the division's Frankfort Field Office which contains a summary report of all record keeping required in Sections 5.a 7. d.3, 5.d.5, and 5.d.6.

8. Alternate Operating Scenarios:

None

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

	<u>Description</u>	<u>Generally Applicable Regulation</u>
1.	30,000 gallon propane tank	None
2.	Surface preparation for maintenance painting	None
3.	Maintenance paint spray booth	401 KAR 59:010
4.	Five hot melt magazine binding gluers	None
5.	Five natural gas/propane space heaters	None
6.	Ink jet printing	None
7.	Five ink jet head cleaning stations	None
8.	Six chillers with associated cooling towers	401 KAR 63:010
9.	Scrap paper collection system	401 KAR 59:010
10.	Boiler X1 - 4.0 MMBtu/hr Natural gas fired with propane backup	401 KAR 59:015
11.	Boiler X2 - 4.0 MMBtu/hr Natural gas fired with propane backup	401 KAR 59:015
12.	Cold solvent cleaner	None
13.	84 Co-Raynac heaters (NG)/Propane	None

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. VOC and HAPs emissions, as measured by methods referenced in 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.

Compliance Demonstration Method:

- a. The following formula or equivalent may be used in calculating emissions of VOC/HAP's from ink:

$$\text{VOC/HAP emitted (lbs)} = \Sigma \{ \text{gallons of ink} \times \text{VOC/HAPS content of ink (lbs/gal)} \times 0.8 \times (1 - \text{control efficiency of the oxidizers}) \}$$

- b. The following formula or equivalent may be used in calculating emissions of VOC/HAP's from fountain solution:

$$\text{VOC/HAP emitted (lbs)} = \Sigma \{ \text{gallons of fountain solution concentrate} \times \text{VOC/HAP content of fountain solution concentrate (lbs/gal)} \times 0.7 \times (1 - \text{control efficiency of the oxidizers}) \} + \Sigma \{ \text{gallons of fountain solution concentrate} \times \text{VOC content of fountain solution (lbs/gal)} \times 0.30 \}$$

- c. The following formula or equivalent may be used in calculating emissions of VOC/HAP's from clean up solvent (Auto Blanket Wash ABW):

$$\text{VOC/HAP emitted (lbs)} = \Sigma \{ \text{gallons of ABW} \times \text{VOC content of ABW (lbs/gal)} \times 0.4 \times (1 - \text{control efficiency of the oxidizers}) \} + \Sigma \{ \text{gallons of ABW} \times \text{VOC content of ABW (lbs/gal)} \times 0.60 \}$$

- d. The following formula or equivalent may be used in calculating emissions of VOC/HAP's from clean up solvent (Manual Blanket Wash MBW):

$$\text{VOC/HAP emitted (lbs)} = \Sigma \{ \text{gallons of MBW} \times \text{VOC content of MBW (lbs/gal)} \times 0.50 \}$$

VOC/HAP emissions determined by formulas (a) through (d) or equivalent shall be summed and used to demonstrate compliance with the emission limitations listed for each affected facility(s).

3. Testing shall be conducted at such times as may be required by the cabinet in accordance with the Regulations 401 KAR 59:005 Section 2(2) and KAR 50:045 Section 4.

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

4. 401 KAR 63:020; Potentially hazardous matter or toxic substances, applicable to each affected facility (s) which emits or may emit potentially hazardous matter or toxic substances.

Compliance Demonstration Method:

The source is in compliance with 401 KAR 63:020 based on the emission rates of toxics given in the application submitted by the source. If the source alters process rates, material formulations, or any other factor that would result in an increase of toxic emissions or the addition of toxic emissions not previously evaluated by the Division, the source shall submit the appropriate application forms pursuant to 401 KAR 52:020, Section 3(1)(a), along with modeling to show that the facility will remain in compliance with 401 KAR 63:020.

5. **Specific Recordkeeping Requirements:**

- a. The permittee shall keep calendar month records of the usage of each coating, solvent, thinner diluent, and clean up solvent or any other VOC/ HAP containing material;
- b. At the end of each month volatile organic compound (VOC) and hazardous air pollutants (HAPS) emissions in tons shall be calculated and recorded;
- c. The annual emission for each rolling 12 month year shall be calculated and kept available at the plant site;
- d. The records listed above, as well as purchase orders and invoices for all VOC/HAP containing materials, shall be made available for inspection upon request by duly authorized representatives of the Division for Air Quality;
- e. The permittee shall keep records of all maintenance activities performed on the control equipment.

6. **Specific Reporting Requirements:**

Reporting of the following shall be done on a semi annual-basis:

- a. Any deviations from requirements of section B shall be reported;
- b. The VOC emission for each month in the semi-annual period shall be reported;
- c. The individual HAP emissions for each month in the semi-annual period shall be reported;
- d. The combined HAPs emission for each month in the semi-annual period shall be reported;
- e. The rolling 12 month total for VOC during each month in the semi-annual period shall be reported;
- f. The rolling 12 month total of individual HAP's for each month in the semi-annual period shall be reported;
- i. The rolling 12 month total of combined HAP's for each month ending in the semi-annual period shall be reported

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit;
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within *30 days*. Other deviations from permit requirements shall *be included in the semiannual report required by Section F.6* [Section 1b (V) 3, 4. of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for air Quality
Frankfort Regional Office
643 Teton Trail Suite B
Frankfort, KY. 40601-1756

U.S. EPA Region IV
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
11. Pursuant to Section VII (3) of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.

SECTION G - GENERAL PROVISIONS**(a) General Compliance Requirements**

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].
15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source pre-construction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

SECTION G - GENERAL PROVISIONS (CONTINUED)

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:
 - a. Applicable requirements that are included and specifically identified in the permit and
 - b. Non-applicable requirements expressly identified in this permit.

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

SECTION G - GENERAL PROVISIONS (CONTINUED)**(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, **emission points 13** in accordance with the terms and conditions of this permit.

1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
 - a. The date when construction commenced.
 - b. The date of start-up of the affected facilities listed in this permit.
 - c. The date when the maximum production rate specified in the permit application was achieved.
3. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration test on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. These performance tests must also be conducted in accordance with General Provisions G (d)7 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test

SECTION G - GENERAL PROVISIONS (CONTINUED)

6. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

(e) Acid Rain Program Requirements

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
 - e. This requirement does not relieve the source of other local, state or federal notification requirements.
2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center
P.O. Box 3346
Merrifield, VA, 22116-3346

SECTION G - GENERAL PROVISIONS (CONTINUED)

3. If requested, submit additional relevant information to the Division or the U.S. EPA.

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
 - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION H - ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE

None